The City of Oceanside

Water Quality Report 2015

The City of Oceanside is committed to providing you with safe drinking water.

We are pleased to report that your drinking water meets or exceeds all state and federal health standards for water quality.

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

Your water is routinely tested for about 90 different substances to ensure that the water is of the highest quality. This report lists the substances that were detected during 2015 and includes details about where your water comes from. For more information about your water, contact Robert Gutierrez at **(760) 435-5987**.

HEALTH INFORMATION

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at **(800) 426-4791**.

WATER SOURCES

The City of Oceanside has three sources of drinking water. The primary source is imported water that is purchased untreated from the **San Diego County Water Authority (SDCWA)**. This raw water is then treated at Oceanside's **Robert A. Weese (R. A.Weese)** water treatment plant. This facility filters and disinfects surface water from lakes and rivers, supplying about 43% of the drinking water used by the people of Oceanside.

The second source is Oceanside's **Mission Basin Desalting Facility (MBDF)**. This facility treats brackish groundwater from wells located in the San Luis Rey River valley. The groundwater is purified by reverse osmosis and then disinfected. The MBDF supplies about 13% of the drinking water used in Oceanside. The third source is **treated drinking water purchased directly from SDCWA**. About 44% of the treated water used in Oceanside is purchased from SDCWA.

IMPORTED WATER

Approximately 87% of the water we use in Oceanside is imported from hundreds of miles away. This is "surface water" from rivers and streams in Northern California and the Colorado River Basin.

The **Metropolitan Water District (MWD)** imports this water to Southern California via a 242-mile-long aqueduct that carries Colorado River water from Lake Havasu, and a 444-mile-long aqueduct bringing water from the Sacramento-San Joaquin Delta. Both aqueducts terminate in Lake Skinner in Riverside County, where these waters are combined. SDCWA purchases this imported water from MWD and distributes it to water agencies throughout San Diego County, including the City of Oceanside.

SOURCE WATER ASSESSMENT

In December 2002, MWD completed its source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered to be most vulnerable to contamination from recreation, urban/storm water runoff, increasing urbanization in the watershed, and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A summary of the assessment can be obtained by contacting MWD by phone at **(213) 217-5696**.

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GROUND WATER ASSESSMENT

An assessment of the current groundwater sources for the City of Oceanside was completed in February 2002. The sources are considered most vulnerable to contamination from sewer collections and/or agricultural/ irrigation wells. A copy of the complete assessment is available at the City of Oceanside Water Utilities Department at 300 North Coast Highway in Oceanside.
You may request a summary of the assessment by calling **(760) 435-5800**.

The Oceanside Utilities Commission meets bi-monthly in the City Council Chambers, at 300 North Coast Highway. The public is welcome to participate in these meetings.

FOR MORE INFORMATION

Please call (760) 435-5800.

Oceanside's Water Meets Stringent Federal and State Water Requirements

FLUORIDE

Oceanside has three sources of water: raw water that is treated at the R. A. Weese water treatment plant; groundwater that is treated at the MBDF; and treated water purchased from SDCWA. Oceanside does not add fluoride during treatment at R. A. Weese or the MBDF. The fluoride found in these raw water sources is naturally occurring at 0.3 ppm. The third source is imported treated water from SDCWA. Only the imported treated water has added fluoride.

The area south of Oceanside Blvd. usually receives this fluoridated water with an average concentration of 0.8 ppm. The water delivered to all other areas in the City usually has an average fluoride level of 0.3 ppm. However, when the City's treatment plants are not operating at full capacity, some or all of the water supply for Oceanside can contain added fluoride up to 0.8 ppm.

LEAD

The drinking water is tested for lead every three years and was last tested in 2015. Samples were collected inside 50 private homes and at the entry points to the water distribution system. There was no lead detected in the water entering the distribution system, but some of the homes had very small amounts of lead detected. None of the homes exceeded the Action Level (15 ppb) for lead. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Oceanside is responsible for providing high quality drinking water, but cannot control the variety of materials used in home plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at **www.epa.gov/safewater/lead**

CONTAMINANTS IN DRINKING WATER

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline **(1-800-426-4791)** or at **www.epa.gov/safewater**.

CONTAMINANTS IN SOURCE WATER

The sources of tap water and bottled water include rivers, lakes, streams, springs and wells. Water, as it travels over the surface or through the ground, can pick up or dissolve natural minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be found in source water include the following:

Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application and septic systems.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

2015 Report of Detected Compounds

The City of Oceanside

	Unit	MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Source Waters: R.A. Weese Plant	Mission Basin Desalting Facility	SDCWA: Twin Oaks Valley Plant	SDCWA: Skinner Plant	SDCWA: Carlsbad Desalination Plant	Sources in Drinking Water
PRIMARY STANDARDS -- Mandatory Health-related Standards											
Turbidity (a)	NTU	TT	NA	NA	Highest	0.15	0.10	0.02	0.10	0.04	Soil runoff.
					%<0.3 NTU	100%	100%	100%	100%	100%	
INORGANIC											
Aluminum (b)	ppb	1000	600	50	Range	ND - 220	ND	ND	ND	ND	Residue from water treatment process; Erosion of natural deposits.
					Average	125	ND	ND	ND	ND	
Arsenic	ppb	10	0.004	2	Range	NA	NA	NA	ND	ND	Leaching from natural deposits
					Average	ND	ND	3.0	ND	ND	
Barium	ppb	1000	2000	100	Range	NA	NA	NA	NA	ND	Erosion of natural deposits.
					Average	130	ND	120	124	ND	
Fluoride Natural	ppm	2	1	0.1	Range	0.2 - 0.4	ND - 0.1	0.3	0.2–0.4	0.9 - 1.1	Erosion of natural deposits.
					Average	0.3	0.1	0.3	0.3	NA	
Fluoride (c) Added	ppm	2	*Optimal Control Range* 1	0.1	Range	NA	NA	0.6 - 1.0	0.5–0.9	0.5–1.0	Water additive for dental health.
						Not added	Not added	0.8	0.7	0.8	
Nitrate as N	ppm	10	10	0.4	Range	ND - ND	1.5 - 4.2	ND - 0.3	ND	0.7-0.9	Runoff & leaching from fertilizer use; sewage; erosion of natural deposits.
					Average	ND	1.9	ND	ND	0.8	
Copper (d)	ppm	1.3 (AL)	0.3	0.05	Range for 50 homes sampled = ND - 0.69 90th percentile for 50 homes sampled = 0.21						Internal corrosion of household plumbing; erosion of natural deposits.
Lead (d)	ppb	15 (AL)	0.2	5	Range for 50 homes sampled = ND - 4.5 90th percentile for 50 homes sampled = 0.8						Internal corrosion of household plumbing; erosion of natural deposits.
MICROBIOLOGICAL											
Total Coliform Bacteria (e)	%	5.0	0	NA	Range Average	Distribution System = ND - ND Distribution System = ND					Natural bacteria found in the environment.
RADIOLOGICAL (f)											
Gross Alpha	pCi/L	15	none	3	Range	NA	NA	ND	ND - 5	ND	Erosion of natural deposits.
					Average	2.3	0.54	ND	ND	ND	
Gross Beta(g)	pCi/L	50	none	4	Range	NA	NA	ND	5	ND	Decay of natural and man-made products.
					Average	NA	NA	ND	5	ND	
Uranium	pCi/L	20	0.43	1	Range	NA	NA	1.7 - 2.3	1 - 2	ND	Erosion of natural deposits
					Average	3.6	3.6	2	2	ND	
Disinfection by Products (DBP)											
Total Chlorine (i)	ppm	(RAA) [4.0]	[4.0]	NA	Distribution System wide range = 0.1 - 3.3 Distribution System highest RAA = 2.2						By-product of drinking water chlorination.
Haloacetic acids (h)	ppb	(LRAA) 60	NA	1	Distribution System wide range = 1-23 Distribution System highest LRAA = 17						By-product of drinking water chlorination.
Total Trihalo-methanes (h)	ppb	(LRAA) 80	NA	1	Distribution System wide range = 20-38 Distribution System highest LRAA = 37						By-product of drinking water chlorination.
SECONDARY STANDARDS -- Aesthetic Standards											
Chloride	ppm	500	NA	NA	Range	85 - 95	108 - 144	NA	102–105	40-54	Runoff/leaching from natural deposits; seawater influence
					Average	91	133	110	104	44	
Color	Units	15	NA	NA	Range	ND	ND	ND	1	ND	Naturally occurring organic materials
					Average	ND	ND	ND	1	ND	
Total Hardness	ppm	NA	NA	NA	Range	200 - 320	170 - 240	NA	290–307	40-60	Leaching from natural deposits
					Average	283	205	310	299	50	
Total Hardness	grains/ gal	NA	NA	NA	Range	12 - 19	10 - 14	NA	17 - 18	2-4	Leaching from natural deposits
					Average	16	12	18	17	3	
Odor	TON	3	NA	1	Range	ND	ND	NA	2	ND	Naturally occurring organic materials
					Average	ND	ND	2	2	ND	
Sulfate	ppm	500	NA	0.5	Range	191 - 275	89 - 115	NA	237–249	15-18	Runoff/leaching from natural deposits; seawater influence
					Average	249	104	250	243	17	
Total Dissolved Solids	ppm	1000	NA	NA	Range	NA	NA	NA	639–655	120-218	Runoff/leaching from natural deposits; seawater influence
					Average	640	430	690	647	194	
Turbidity	NTU	5	NA	NA	Distribution System wide range = 0.05 - 0.40 Distribution System wide average = 0.10						Soil runoff
UNREGULATED CONTAMINANTS (UCMR3) (j)											
Chlorate	ppb	NA	210	20	Range	28 - 41	NA	130-320	97		By product of drinking water chlorination.
					Average	34	100	220	97	NA	
Molybdenum	ppb	NA	35	NA	Range	4.2 - 4.7	NA				Naturally occuring element
					Average	4.4	3.0	NA	NA	NA	
Strontium	ppb	NA	4200	NA	Range	950 - 1200	NA	ND		ND	Naturally occuring element
					Average	1080	180	ND	NA	ND	
Vanadium	ppb	NA	21	3	Range	ND	ND	NA	NA		Naturally occuring Industrial waste discharge.
					Average	ND	ND	ND	ND	NA	
ADDITIONAL PARAMETERS											
Alkalinity as $CaCO_3$	ppm	NA	NA	NA	Range	98 - 133	73 - 97	NA	125–130	46 - 56	Leaching from natural deposits
					Average	115	86	120	128	50	
Boron	ppb	1000(NL)	NA	100	Range	NA	NA	NA	130	300-740	Leaching from natural deposits
					Average	NA	NA	140	130	410	
Calcium	ppm	NA	NA	NA	Range	48 - 82	38 - 51	NA	75–78	15 - 23	Leaching from natural deposits
					Average	70	44	77	77	20	
Heterotrophic Plate Count	CFU/mL	TT	NA	NA	Distribution System wide range = ND - 380 Distribution System wide average = 4						Bacteria naturally present in the environment.
Magnesium	ppm	NA	NA	NA	Range	19 - 30	19 - 28	NA	25–27	0.3 - 0.6	Leaching from natural deposits
					Average	26	23	28	26	0.4	
pH	pH units	NA	NA	NA	Range	7.2 - 8.0	7.9 - 8.4	7.7 - 8.3	8.1–8.2	8.0–8.7	Measure of the acidic or basic character of water.
					Average	7.8	8.2	8.1	8.1	8.5	
Sodium	ppm	NA	NA	NA	Range	NA	NA	NA	96–103	32-94	Leaching from natural deposits
					Average	100	76	120	100	40	

This data table lists all the substances that were detected in the drinking water during 2015 or the most recent sampling prior to 2015. The presence of these substances does not necessarily constitute a health risk.

The table contains the name of each substance, the unit of measurement, the highest level allowed, the ideal goals, the detection level, the amount detected, and the usual source of the substance. Some substances are not tested each year because the concentrations do not vary significantly from year to year. For these substances, the table includes data from the most recent testing done within the past 5 years.

Table Footnotes, Terms and Abbreviations are listed on next page.

TABLE FOOTNOTES

a) Turbidity is a measure of the cloudiness of the water. We monitor it because it indicates the effectiveness of our filtration system. Treatment plant effluent turbidity is recorded every 15 minutes. The turbidity of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month. Turbidity shall not exceed 1.0 NTU at any time. Turbidity is also tested at 30 locations each month within the distribution system and reported under Secondary Standards.

b) Aluminum also has a secondary MCL of 200 ppb or 0.2 ppm.

c) MWD started fluoridation treatment in 2007. Some MWD water is used to supplement Oceanside's treated water. Oceanside does not currently fluoridate during treatment.

d) Lead and Copper are tested every three years at consumer's taps. It was last tested in 2015. If the Action level is exceeded in 10% of the samples (90th percentile), then the water supplier must modify the treatment process to prevent the leaching of these metals into the water from the plumbing. None of the samples exceeded the Action levels.

e) No more than 5.0% of all monthly samples taken in the distribution system may be Total Coliform positive. In 2015, there were 1,613 samples taken throughout the City and none were positive.

f) Analyzed every six years. R.A. Weese sampled 2013, MBDF sampled 2012, MWD (SDCWA) 2014.

g) California Division of Drinking Water considers 50 pCi/L to be the level of concern for beta particles.

h) Compliance is based on a location running annual average (LRAA) of 8 distribution system sample locations taken every quarter.

i) Compliance is based on a running annual average (RAA) of 30 distribution system samples taken each month.

j) UCMR3 = Unregulated Contaminants Monitoring Rule 3. The EPA requires monitoring in order to determine if there is a need to regulate these compounds. Testing for R.A. Weese and MBDF was completed in 2015. Testing for MWD (SDCWA) was performed in 2014.

TERMS AND ABBREVIATIONS

AL – *Regulatory Action Level, the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.*
CFU/mL – *Colony Forming Unit per milliliter, a measure of the amount of all types of bacterial found in the water.*
DLR – *Detection Limit for purposes of Reporting, the lowest level that can be reliably detected and quantified.*
LRAA – *Location running annual average.*
MCL – *Maximum Contaminant Level, the highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.*
MCLG – *Maximum Contaminant Level Goal, the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.*
MRDL – *Maximum Residual Disinfectant Level, the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.*
MRDLG – *Maximum Residual Disinfectant Level Goal, The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.*
NA – *Not Applicable or not specified*
ND – *Not Detected*
NTU – *Nephelometric Turbidity Units, a measure of clarity.*
pCi/L – *Picocuries per liter, a measure of radiation.*
PDWS – *Primary Drinking Water Standard, MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.*
PHG – *Public Health Goal, the level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.*
ppb – *Parts per billion or micrograms per liter*
ppm – *Parts per million or milligrams per liter*
RAA – *Running Annual Average, the monthly average of all samples computed each quarter and averaged for four consecutive quarters.*
TON – *Threshold odor number.*
TT – *Treatment Technique, a required process intended to reduce the level of a contaminant in drinking water.*